

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matters of)	
)	
Advanced Methods to Target and)	CC Docket No. 17-59
Eliminate Unlawful Robocalls)	
)	
Call Authentication Trust Anchor)	WC Docket No. 17-97
)	

**REPLY COMMENTS OF
ITTA – THE VOICE OF AMERICA’S BROADBAND PROVIDERS**

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ITTA – The Voice of America’s Broadband Providers (ITTA) hereby submits its reply to comments in response to the *Third FNPRM* in the above-captioned proceedings proposing steps to enhance the ability to block unwanted calls, including illegal robocalls, before they reach consumers’ phones.¹

I. INTRODUCTION AND SUMMARY

It is clearly evident from the breadth of measures taken by the Commission over the past two-and-a-half years to eradicate the robocalls plague that the agency is backing up talk with unprecedented action. ITTA consistently has lauded the Commission’s efforts to combat unwanted calls, including illegal robocalls, and has been an active participant in numerous proceedings from which these actions have sprung.² The Commission’s recent *Declaratory Ruling* empowering voice service providers to, as the default and on an opt-out basis, block calls based on call analytics that target unwanted calls is yet another decision ITTA supports.

¹ *Advanced Methods to Target and Eliminate Unlawful Robocalls; Call Authentication Trust Anchor*, Declaratory Ruling and Third Further Notice of Proposed Rulemaking, FCC 19-51 (June 7, 2019) (*Declaratory Ruling and/or Third FNPRM*).

² *See, e.g.*, Comments of ITTA, CG Docket No. 17-59 (Sept. 24, 2018).

During this time, industry has been working feverishly to develop the “SHAKEN/STIR” Caller ID authentication framework, which addresses unlawful Caller ID spoofing—a process underlying a significant portion of unwanted and illegal robocalls—by confirming that a call actually comes from the number indicated in the Caller ID, or at least that the call entered the US network through a particular voice service provider or gateway.³ The *Third FNPRM* proposes steps to ensure the effectiveness and integrity of the SHAKEN/STIR framework, including encouragement of its widespread deployment.⁴ ITTA agrees with the numerous commenters on the *Third FNPRM* that view the framework as a promising tool for protecting consumers from bad actors who use spoofed telephone numbers to harass and defraud.⁵

However, in numerous respects, SHAKEN/STIR is not yet ready for prime time, and therefore does not yet warrant a comprehensive mandate for voice service providers to implement it. In this regard, LETA cautions that “[i]n its push for the industry’s prompt adoption of SHAKEN/STIR to stop unwanted and illegal robocalls, the FCC and industry should know more about how to avoid unacceptable and unintended consequences in the authentication process through the network, like the blocking of critical calls and emergency alert calls.”⁶ The framework’s lack of compatibility with TDM networks, which remain common, are well documented. Relatedly, the record is rife with concern about the potential for over-blocking of calls, particularly by providers relying solely on SHAKEN/STIR to inform their call blocking.⁷

³ See *Declaratory Ruling and Third FNPRM* at 8, para. 21.

⁴ See, e.g., *id.* at 2, 17, 25, paras. 2, 48, 77.

⁵ See, e.g., Cloud Communications Alliance Comments at 1; ACA Connects Comments at 2. Unless otherwise noted, all citations to comments herein refer to comments on the *Third FNPRM* filed on or prior to July 24, 2019.

⁶ LETA Comments at 4.

⁷ See, e.g., CUNA Comments at 5-6; Securus Comments at 4, 6-7; PRA Group Comments at 1-2.

In addition, the SHAKEN/STIR governance structure and other operational details remain incomplete.⁸

To be clear, ITTA supports further Commission action to sanitize the nation's telephone networks from infection by unwanted robocalls as rapidly and thoroughly as practicable. However, ITTA has concerns regarding numerous proposals in the *Third FNPRM*, especially those pertaining to what functionally amounts to a laser-focus on SHAKEN/STIR implementation. Further combined with the substantial likelihood of Congress enacting on-point legislation in the near-term, the Commission should, at this juncture, adopt more a more measured approach in response to the *Third FNPRM* to facilitate the deployment of solutions that better service consumers.

Specifically, the Commission should adopt a safe harbor that immunizes from liability call blocking based on reasonable analytics, whether or not combined with SHAKEN/STIR implementation. Such a safe harbor would foster more universal implementation of call blocking, whose effectiveness SHAKEN/STIR is designed to enhance. The Commission also should refrain from knee-jerk imposition of a SHAKEN/STIR implementation requirement on all voice service providers in the event not all major voice service providers succeed in "voluntary" SHAKEN/STIR implementation by the end of 2019.

Instead, it should focus on implementation of whatever legislation Congress enacts with respect to unwanted calls, contouring rules regarding call authentication to the legislation's prescriptions regarding implementation timelines, treatment of call authentication by smaller and/or rural providers and in TDM networks, consideration of alternative call authentication technologies, and other related matters. If, after following the course prescribed by Congress, the Commission still finds that SHAKEN/STIR implementation is a critical component of

⁸ See, e.g., CUNA Comments at 3-4; Cloud Communications Alliance Comments at 3-5; American Bankers Association et al. Comments at 3.

comprehensive efforts by *all* voice service providers to combat unwanted calls, the Commission then should concentrate on the steps it should take to ensure other voice service providers successfully implement SHAKEN/STIR, such as a staggered implementation timeline that properly accounts for the network realities of many smaller and/or rural providers, as well as reasonable provision for cost recovery.

II. THE PUBLIC INTEREST BENEFITS OF SWEEPING IMPLEMENTATION OF DEFAULT CALL BLOCKING BY PROVIDERS WILL BE PROMOTED BY COMMISSION ADOPTION OF A BROAD SAFE HARBOR

The *Third FNPRM* proposes a safe harbor for providers that offer call-blocking programs that take into account whether a call has been properly authenticated under the SHAKEN/STIR framework.⁹ A safe harbor based only on calls that fail authentication under SHAKEN/STIR would be under-inclusive as far as motivating providers to adopt call-blocking mechanisms, which would hinder fulfillment of the Commission's objectives to eliminate or sharply reduce consumer receipt of unwanted calls. The Commission should adopt a broader safe harbor that encompasses call-blocking programs based on reasonable analytics.

A. A Safe Harbor Should Not Rely Merely on SHAKEN/STIR Implementation

After proposing a safe harbor for providers that offer call-blocking programs that take into account whether a call has been properly authenticated under the SHAKEN/STIR framework, the *Third FNPRM* asks whether the Commission should offer a more expansive safe harbor to encourage adoption of call-blocking programs.¹⁰ ITTA responds with a determined "yes."

The SHAKEN/STIR framework is not designed for TDM networks, meaning that there will be tremendous gaps in which originating providers can sign calls and which terminating

⁹ See *Declaratory Ruling and Third FNPRM* at 17, para. 49.

¹⁰ See *id.* at 19, para. 53.

providers can authenticate them. A safe harbor that relies exclusively on this framework, therefore, will be of limited or no use to numerous providers. Moreover, this safe harbor proposal could lead to over-blocking wanted or even critical calls until all, or at least the vast majority of, providers have implemented the framework. While such over-blocking would be in good faith, it also would be contrary to the public interest. There are also other limitations on the utility of SHAKEN/STIR to establish calls as unwanted or illegal.

A broader safe harbor that encompasses call-blocking programs based on reasonable analytics will incent providers to deploy call-blocking mechanisms and discipline call blocking based on SHAKEN/STIR, at least until SHAKEN/STIR implementation has reached critical mass. In so doing, such a safe harbor will promote deployment of technologies that more directly protect consumers by actually blocking, rather than merely identifying, unwanted calls. It will also possess a broader reach insofar as it will help protect consumers of services both on IP *and* TDM networks.

1. SHAKEN/STIR Authentication is Not Dispositive of Whether a Call is Unwanted or Illegal

The record reflects that there are limitations on the utility of SHAKEN/STIR as far as establishing whether a call is unwanted or illegal. For instance, “SHAKEN/STIR simply provides the identity of the originating carrier and whether that carrier claims to know whether their customer has the rights to use the telephone number that it signals,” but the framework does not provide the identity of the calling party.¹¹ In addition, CenturyLink, which has been a central player in the development of SHAKEN/STIR technology and related industry standards, as well

¹¹ Numeracle Comments at 6; *see* Letter from Rebekah Johnson, CEO, Numeracle, to Marlene H. Dortch, Secretary, FCC, CG Docket No. 17-59, WC Docket No. 17-97, at 3 (filed Aug. 1, 2019) (Numeracle Aug. 1 *Ex Parte*) (“The vetted Calling Party identity is the missing component in SHAKEN/STIR so that call recipients know the identity of the caller”). Thus, while SHAKEN/STIR may be a *partial* solution to Caller ID spoofing, it does not solve for the fundamental problem that spoofing “makes it impossible for consumers to identify the caller when deciding whether to answer a call.” *Declaratory Ruling and Third FNPRM* at 6, para. 15.

as having played an active role in leading the focus group that developed the basic SHAKEN interoperability testing process,¹² cautions:

CenturyLink strongly advises against blocking *all* unsigned or improperly signed calls. Not all calls can be authenticated. . . . Caller ID spoofing is not always illegal or unwarranted. Caller ID may be legitimately substituted by a business/university/government or medical office that utilizes a centralized calling platform; by organizations that have shared inbound numbers; by small businesses using call diversion and forwarding; or by facilities that need to protect the caller's identity.¹³

ITTA also observes that SHAKEN/STIR continues to leave unaddressed cases where fraudsters or other illegal callers do not spoof Caller ID.¹⁴

While the objective of the *Declaratory Ruling* was to encourage voice service providers to immediately offer to their customers tools to block unwanted calls,¹⁵ critical limitations on the utility of SHAKEN/STIR to establish calls as unwanted or illegal may operate at cross-purposes with that objective if undue emphasis is placed on the haste of SHAKEN/STIR deployment.

Therefore, a safe harbor that is designed to “encourage[] swift implementation of authentication”¹⁶—even if conceding the questionable weight of the predicate that authentication “will provide a strong basis for call blocking”¹⁷—conflates the goal of “fight[ing] against illegal Caller ID spoofing” with the loftier objective of encouraging voice service providers to

¹² See Letter from Andrew J. Dugan, CTO, CenturyLink, to Hon. Ajit Pai, Chairman, FCC, WC Docket No. 17-97, at 1-2 (filed Nov. 19, 2018).

¹³ *Id.* at 3.

¹⁴ See *Declaratory Ruling and Third FNPRM* at 2, para. 2 (noting the same shortcoming associated with the Commission’s 2017 *Call Blocking Report and Order*, in which the Commission expressly authorized voice service providers to block certain categories of calls that are highly likely to be illegal). See also *Advanced Methods to Target and Eliminate Unlawful Robocalls*, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9706 (2017) (*Call Blocking Report and Order*).

¹⁵ See, e.g., *Declaratory Ruling and Third FNPRM* at 9, 11, paras. 25, 32.

¹⁶ *Id.* at 18, para. 50.

¹⁷ *Id.*

immediately offer their customers tools to block unwanted or illegal calls.¹⁸ Moreover, in so doing, the safe harbor, contoured as proposed by the *Third FNPRM* merely to cover providers that offer call-blocking programs that take into account whether a call has been properly authenticated under the SHAKEN/STIR framework, threatens to undermine that loftier objective by leaving providers that immediately implement call-blocking mechanisms without the benefit of safe harbor protections exposed to liability for the potential over-blocking of calls.

2. At Least at This Juncture, a Safe Harbor for Call-Blocking Solely Based Upon SHAKEN/STIR Authentication is Bound to Result in Over-Blocking

As relayed above, the record in response to the *Third FNPRM* is replete with concern about the potential for over-blocking of calls, especially by providers relying solely on SHAKEN/STIR to inform their call blocking.¹⁹ These concerns are particularly acute with respect to calls originated on TDM networks. Because SHAKEN/STIR relies on IP packets, calls originated on TDM networks cannot be signed and will not support any SHAKEN/STIR authentication.²⁰ The potential result is such calls being subject to being blocked wholesale. As CenturyLink elaborates:

Many calls cannot be authenticated at origination or received with certification at termination, particularly where legacy TDM networks are involved. While the lack of authentication will help providers identify and appropriately screen some

¹⁸ *Id.* at 7, para. 20 (“the Commission has pushed industry to quickly develop and implement Caller ID authentication, a critical component in the fight against illegal Caller ID spoofing”). Such conflation is eminently apparent from the footnote tagged to the end of the quoted sentence, in which the Commission asserts that “SHAKEN/STIR authentication will reduce the effectiveness of unlawful spoofing and will improve traceback, but it is not, taken alone, intended to determine whether the content of a particular call is lawful.” *Id.* at n.38.

¹⁹ See *supra* note 7 and accompanying text.

²⁰ See *Declaratory Ruling and Third FNPRM* at 8, para. 21 n.43 (“SHAKEN/STIR as developed is intended for IP networks. As a result, calls that originate, transit, or terminate on TDM networks may not benefit from it.”). It also “does not work at all for calls that exclusively traverse TDM networks.” *Id.* at 26, para. 80.

unlawful calls, it cannot be the exclusive basis for blocking calls. Otherwise, far too many legitimate calls will be blocked through “false positives” . . .²¹

This is precisely the outcome the Commission should expect if it adopts a safe harbor merely covering providers that offer call-blocking programs that take into account whether a call has been properly authenticated under the SHAKEN/STIR framework.

A safe harbor is “a legal provision in a statute or regulation that provides protection from a legal liability or other penalty when certain conditions are met.”²² ITTA wholeheartedly supports providers, implementing call-blocking programs for the benefit of consumers, receiving the liability protections of a safe harbor in order to secure a rare victory over the adage that “no good deed goes unpunished.” The *Third FNPRM* tentatively concludes that adopting a safe harbor would confer more certainty upon providers, thereby greatly facilitating their “reasonable use of call blocking technologies.”²³

However, the proposed safe harbor as structured in the *Third FNPRM* fails to achieve the proper balancing that is the typical hallmark of Commission-adopted safe harbors. It is over-inclusive insofar as, at least until the presence of TDM networks has dramatically diminished, it

²¹ Letter from Andrew J. Dugan, CTO, CenturyLink, to Hon. Geoffrey Starks, Commissioner, FCC, at 2-3 (filed July 10, 2019) (CenturyLink July 10 Letter).

²² Winston & Strawn LLP, *What is a Safe Harbor?*, <https://www.winston.com/en/legal-glossary/safe-harbor.html> (last visited Aug. 15, 2019). The Commission frequently has employed safe harbors to afford regulatees protection from liability while implementing consumer protection measures in a manner balanced with affording regulatees a reasonable opportunity to comply. See, e.g., *Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991*, Order, 19 FCC Rcd 19215, 19218, para. 7 (2004) (implementing a 15-day safe harbor period in which persons would not be liable for placing autodialed or artificial or prerecorded message calls to numbers recently ported from wireline to wireless service; in so doing, the Commission balanced business comments supporting a period of 30 days or more with consumer advocate comments urging a period as limited as possible or even no safe harbor period, and found that the safe harbor period it adopted would not unduly infringe consumer privacy interests but would “provide a reasonable opportunity for persons, including small businesses, to identify numbers that have been ported from wireline to wireless service and, therefore, allow callers to comply” with the Commission’s rules).

²³ *Declaratory Ruling and Third FNPRM* at 20, para. 59.

is likely to lead to an overabundance of call blocking that may benefit some would-be call recipients but that will also harm numerous legitimate callers as well as the would-be recipients who will miss out on such legitimate calls. It is also under-inclusive insofar as any terminating provider operating a TDM network will be unable to secure safe harbor liability protections, which will deter many from deploying call-blocking programs where they otherwise would have but for the unduly narrow safe harbor, to the detriment of their customers and their own potential competitive detriment.²⁴ As discussed below, the Commission must rectify this inevitably skewed outcome by adopting a broader safe harbor that encompasses call-blocking programs based on reasonable analytics.

3. The Commission Should Adopt a Safe Harbor that Covers Call-Blocking Programs Based on Reasonable Analytics

The *Declaratory Ruling* holds that voice service providers “may offer opt-out call-blocking programs based on any reasonable analytics designed to identify unwanted calls.”²⁵ Among the examples it delineates of “call-blocking programs that may be effective and would be based on reasonable analytics designed to identify unwanted calls” is a call-blocking program “designed to incorporate information about the originating provider, such as whether it has been a consistent source of unwanted robocalls and whether it appropriately signs calls under the

²⁴ The *Third FNPRM* recognizes that smaller and rural carriers particularly have experienced challenges that delay their transition to IP networks. *See id.* at 26, para. 80. Thus, a safe harbor contoured only to take into account whether a call has been properly authenticated under the SHAKEN/STIR framework would eliminate, at the starting line, a large class of carriers from its benefits, disproportionately affecting smaller and rural carriers. Such an outcome would directly contravene the Commission’s purported intentions in this proceeding to take steps to minimize the significant economic impact on small entities. *See id.* at 49, Appx. F, Initial Regulatory Flexibility Analysis (IRFA), at para. 25 (“we intend to craft rules that encourage all carriers, including small businesses, to block” illegal and unwanted calls, “seek[] comment from small businesses on how to minimize costs associated with implementing the proposed rules,” and “pose[] specific requests for comment . . . regarding . . . what could be done to minimize any disproportionate impact on small businesses”).

²⁵ *Id.* at 12, para. 34.

SHAKEN/STIR framework.”²⁶ With the *Declaratory Ruling* having found call-blocking programs to be permissible (and desirable) when based on “reasonable analytics,” and then depicting SHAKEN/STIR implementation as but one component of an effective call-blocking program based on reasonable analytics, ITTA is bewildered how the *Third FNPRM* proposes SHAKEN/STIR implementation to be the *sine qua non* for a safe harbor. In order to remedy this disconnect with the *Declaratory Ruling*, promote the deployment of call-blocking programs in the public interest, and overcome the policy and pragmatic deficiencies of a safe harbor solely based on SHAKEN/STIR implementation, the Commission must adopt a broader safe harbor that encompasses call-blocking programs based on reasonable analytics.

As discussed above, there are limitations on the utility of SHAKEN/STIR to establish calls as unwanted or illegal, and they are even more pronounced at this juncture, when there still is a significant TDM network presence. In light of these limitations, the Commission should not myopically view SHAKEN/STIR implementation as the only manifestation of what “reasonable” analytics are. ITTA agrees with NCTA that adopting a broad safe harbor will encourage the deployment of programs for blocking unwanted or illegal calls, thereby maximizing the benefits of these programs for consumers, and will help ensure that voice providers have the regulatory certainty they may need to implement robust call blocking programs and therefore advance the Commission’s efforts to forcefully combat unwanted and illegal calls.²⁷ ITTA likewise concurs with Sprint that “SHAKEN/STIR data will likely be only one factor of many in deciding whether a given call is illegal or unwanted,” and because it is inevitable that legal calls will occasionally

²⁶ *Id.* at 13, para. 35.

²⁷ *See* NCTA Comments at 3, 9-10.

be misidentified as illegal robocalls, providers must have some form of liability protection in those circumstances.²⁸

In this regard, the Commission should decline entreaties to delay effectiveness of a safe harbor until all providers have fully implemented SHAKEN/STIR.²⁹ Some commenters oppose a safe harbor that is based solely on SHAKEN/STIR implementation, and thus urge the Commission to delay institution of any safe harbor.³⁰ This, however, is the wrong result for the right reason, as the solution is a safe harbor that also considers reasonable analytics, not delaying safe harbors altogether. Some even go further than espousing a delayed safe harbor, advocating that the Commission not permit any blocking based on SHAKEN/STIR until all providers have implemented it.³¹ This proposal is the proverbial perfect being the enemy of the good and, as such, the Commission should disregard it. What all of these proposals share in common is seeking a delay in establishing any safe harbor or even striving for a delay in permissible call blocking. The Commission should reject any proposal that would result in either outcome, as it would thwart provider adoption of call-blocking mechanisms, thereby depriving consumers of tools to evade the unwanted calls they so detest.

Notably, notwithstanding its puzzling proposal to base a safe harbor solely on SHAKEN/STIR implementation, the *Third FNPRM* itself tacitly suggests that a safe harbor *should* be based on reasonable analytics, with SHAKEN/STIR in a supporting role to the extent implemented. As it explains, “[i]n the accompanying *Declaratory Ruling*, [the Commission] recognize[s] the role that analytics plays in the fight to eliminate unwanted and illegal robocalls .

²⁸ Letter from Charles W. McKee, Vice President, Government Affairs, Sprint, to Hon. Geoffrey Starks, Commissioner, FCC, at 2 (filed July 10, 2019).

²⁹ See, e.g., ACA International Comments at 6-7.

³⁰ See, e.g., AAHAM Comments at 4-5; CUNA Comments at 2-5.

³¹ See, e.g., American Bankers Association et al. Comments at 3; PRA Group Comments at 1-2; Securus Comments at 4.

... SHAKEN/STIR's ability to determine the source of robocalls *will be a significant contribution to the quality of these analytics.*"³²

Relatedly, the *CATA Report* declares that "[a]lthough SHAKEN provides a mechanism for call authentication, this system does not establish call validation treatment applications (e.g., call blocking or certified identity)."³³ This is in contrast to reasonable analytics designed to identify unwanted calls and illegal calls, which the Commission declared to be the basis for opt-out call-blocking programs.³⁴ In other words, unlike reasonable analytics, SHAKEN/STIR is not designed to itself be a blocking tool; at most it augments the use of reasonable analytics to identify unwanted and illegal calls. While SHAKEN/STIR may play an important role in call authentication, which helps to assess the validity or reliability of the Caller ID data, it is one input to the broader base of analytics that provides the logic underlying whether it is appropriate

³² *Third FNPRM* at 20-21, para. 62 (emphasis added). The *Third FNPRM* also indirectly acknowledges these respective roles. While claiming that the North American Numbering Council's Call Authentication Trust Anchor Working Group (CATA) and the Alliance for Telecommunications Industry Solutions "have specifically asked for a safe harbor for blocking based on SHAKEN/STIR," *id.* at 18, para. 49, in the accompanying footnote it quotes the following from the *CATA Report* that it cites for this position: "[A] safe harbor for unintended blocking or mis-identification of the level of trust for individual calls would provide a strong incentive for communications service provider adoption of SHAKEN, *particularly where analytics are overlaid on the framework.*" *Id.* at n.101 (quoting CATA, Report on Selection of Governance Authority and Timely Deployment of SHAKEN/STIR at 14 (2018) (*CATA Report*), http://nanc-chair.org/docs/mtg_docs/May_18_Call_Authentication_Trust_Anchor_NANC_Final_Report.pdf (emphasis added)). See also Numeracle Comments at 3-4; Transaction Network Services (TNS), 2019 Robocall Investigation Report at 27, 30 (2019), <https://ecfsapi.fcc.gov/file/10515248878426/Transaction%20Network%20Services%202019%20Robocall%20Investigation%20Report.pdf>. In the unfortunate event the Commission were to adopt a safe harbor encompassing SHAKEN/STIR implementation as an integral condition and including the related condition of not allowing for consideration of the degree of attestation for successfully authenticated calls, see *Third FNPRM* at 19, para. 53, combining SHAKEN/STIR implementation with analytics would still be critical insofar as a safe harbor merely based on SHAKEN/STIR implementation but not considering the degree of attestation provides an even less reliable gauge of the call's bona fides.

³³ *CATA Report* at 5.

³⁴ See, e.g., *Declaratory Ruling and Third FNPRM* at 12, 20-21, paras. 34, 62.

to block a particular call on account of being unwanted and/or illegal. Without analytics, the SHAKEN/STIR framework would be much more prone to pass through to consumers authenticated calls from bad actors, or block legitimate calls that are unauthenticated (such as those originating on a TDM network).³⁵ Only the broader analytics may provide the appropriate tools to assess whether the call is unwanted and/or illegal. And because the objective of permissible call-blocking programs is to inhibit those calls from reaching consumers, it only makes sense that a safe harbor geared towards encouraging the deployment of such programs must be grounded in the reasonable analytics that inform the logic underlying such programs.

In sum, the Commission should adopt a safe harbor based on application of reasonable analytics. Thus, the Commission should repudiate its proposal to adopt a safe harbor solely limited to reliance on SHAKEN/STIR implementation, and discard comments contending that a safe harbor should depend on SHAKEN/STIR implementation as a precondition.³⁶ ITTA concurs with NCTA that “the Commission should adopt a broad safe harbor that protects voice service providers who block calls in good faith and with a reasonable level of confidence that the blocked calls are illegal or unwanted.”³⁷ At this juncture, that would include calls blocked based on reasonable analytics and calls from numbers that the Commission previously found to be per se indicative of spoofing.³⁸ A safe harbor fashioned in that manner, providing sufficient liability

³⁵ Cf. Attorneys General Press Conference on Combating Robocalls, Patrick Halley, Senior Vice President, Policy & Advocacy, USTelecom, at 24:56 (Aug. 22, 2019), <https://www.c-span.org/video/?463610-1/attorneys-general-press-conference-combating-robocalls> (“call analytics technologies that the carriers are deploying are very sophisticated; they get better every day to identify what is a call that should not go through and a call that should”).

³⁶ See, e.g., American Bankers Association et al. Comments at 3.

³⁷ NCTA Comments at 9.

³⁸ See generally *Call Blocking Report and Order*. In conjunction with such a safe harbor, and in order to foster the call-blocking deployment objectives that a safe harbor would be designed to promote, the Commission should deny comments seeking to standardize and limit the breadth of what it considers to be reasonable analytics, see, e.g., Securus Comments at 3, as well as those arguing that it should rescind altogether the *Declaratory Ruling*’s decision allowing voice service

(continued...)

protections for all qualifying providers rather than a limited class of them, would best fulfill the Commission's avowed "inten[tion] to craft rules that encourage all carriers, including small businesses, to block" unwanted and/or illegal calls, and "minimize costs associated with implementing the proposed rules."³⁹ It also would best address how the proposed safe harbor affects small businesses and "what could be done to minimize any disproportionate impact" on them⁴⁰ given the amount of legacy TDM networks owned by smaller or rural carriers.⁴¹

B. The Commission Need Not Accompany a Safe Harbor Based on Reasonable Analytics with Prescribing Measures to Address Erroneous Call Blocking

The Commission already has spoken to how to address identifying and remedying the blocking of wanted calls.⁴² In the *Declaratory Ruling*, the Commission refrained from imposing requirements concerning how erroneous blocking should be resolved, instead encouraging providers that block calls to develop a mechanism for notifying callers that their calls have been blocked.⁴³ The Commission astutely recognized that industry has been active in developing solutions to help mitigate erroneous blocking.⁴⁴ Further, again here, the encompassing of

(Continued from previous page)_____ providers to rely on reasonable analytics to block calls. *See, e.g.,* ACA International Comments at 8-9; AAHAM Comments at 2-4.

³⁹ *Declaratory Ruling and Third FNPRM* at 49, IRFA para. 25.

⁴⁰ *Id.*

⁴¹ *See supra* note 24.

⁴² *But see Declaratory Ruling and Third FNPRM* at 20, para. 58 (seeking comment on whether the Commission should include as a condition for a safe harbor the provision of a mechanism for identifying and remedying the blocking of wanted calls). The *Third FNPRM* also seeks comment on whether there are any particular protections the Commission should establish for a safe harbor to ensure that wanted calls are not blocked. *See id.* By their very nature, the reasonable analytics that ITTA urges the Commission to adopt as part of qualification for a safe harbor should provide "reasonable" protections in an effort to ensure that wanted calls are not blocked.

⁴³ *See id.* at 14, para. 38. The Commission also expressed its "belie[f] that a reasonable call-blocking program instituted by default would include a point of contact for legitimate callers to report what they believe to be erroneous blocking as well as a mechanism for such complaints to be resolved." *Id.*

⁴⁴ *See id.*

reasonable analytics as the basis of a safe harbor should greatly assist in diminishing false positives to begin with. ITTA believes it was not mere coincidence that the Commission's restrained approach in the *Declaratory Ruling* towards prescribing measures to address erroneous blocking accompanied its endorsement of using reasonable analytics as a basis for call blocking. The Commission need not and should not alter course.⁴⁵

III. THE COMMISSION SHOULD FOCUS ON IMPLEMENTING LIKELY-IMMINENT LEGISLATION AND OTHERWISE PROMOTING SUCCESSFUL SHAKEN/STIR IMPLEMENTATION BY PROVIDERS

Perhaps the most eyebrow-raising proposal in the *Third FNPRM* is to mandate that all voice service providers implement the SHAKEN/STIR framework if “major” providers fail to do so by the end of 2019. The Commission should renounce that proposal, and instead prepare to implement whichever robocall-combating legislation is enacted, likely in the very near future. In the unfortunate event that the Commission, acting on its own, adopts any mandate to implement SHAKEN/STIR, it should prioritize successful implementation over blind haste, taking into account the numerous challenges facing various segments of the industry.

A. Major Voice Service Provider Failure to Implement SHAKEN/STIR by the End of the Year Should Not Result in Mandatory Implementation by All Providers

The *Third FNPRM* proposes to require voice service providers to implement the SHAKEN/STIR framework in the event major voice service providers fail to meet an end of

⁴⁵ The Commission should reject comments seeking all manner of *ex ante* requirements concerning the identifying and remedying of erroneously blocked calls. *See, e.g.*, AAHAM Comments at 5-6; ACA International Comments at 10-12; Cloud Communications Alliance Comments at 9-11; American Bankers Association et al. Comments at 5-6. If the Commission does include as a condition for a safe harbor the provision of a mechanism for identifying and remedying the blocking of wanted calls, at most any scrutiny of what constitutes an acceptable mechanism should have a limited focus on realistic, specified outcomes (e.g., how quickly false positives are remedied) rather than prescription of how providers achieve such outcomes. In this regard, a realistic, reasonable time frame for unblocking wanted calls involves more than a measurement “in hours.” *Contra, e.g.*, Securus Comments at 7.

2019 deadline for voluntary implementation of it.⁴⁶ Dispelling any ambiguity concerning the scope of that proposal, the *Third FNPRM* further proposes to require “implementation by *all* voice service providers—wireline, wireless, and Voice over Internet Protocol (VoIP) providers”—if the Commission mandates provider implementation of the SHAKEN/STIR framework.⁴⁷ ITTA finds these proposals confounding, and urges the Commission to retreat from them.

As an initial matter, they smack of collective punishment. Nowhere does the *Third FNPRM* explain why all is well if “major” voice service providers meet the “voluntary” deadline, nor why the result of even one missing the deadline would signal the critical difference between all is well and the 1,000+ other providers’ need to implement it now. The proposals also ignore the fundamental problem, discussed above,⁴⁸ that SHAKEN/STIR is of little or no utility when TDM networks are involved. Some entities would like the Commission to seize upon any shortfall in major voice service provider compliance to force other providers into prematurely transitioning their networks to IP.⁴⁹ While ITTA fully supports promoting the transition of networks to IP,⁵⁰ capitalizing upon a SHAKEN/STIR implementation mandate to artificially accelerate IP transitions would be a classic case of putting the cart before the horse, exacerbate already-existing anxieties regarding SHAKEN/STIR implementation costs, and,

⁴⁶ See *Third FNPRM* at 23, para. 71.

⁴⁷ *Id.* at 25, para. 75 (emphasis added).

⁴⁸ See *supra* pp. 4-5.

⁴⁹ See, e.g., NCTA Comments at 6-7. NCTA elaborates with understatement that while adopting a SHAKEN/STIR mandate “may” require significant network upgrades for some legacy voice providers, providers should be responsible for their own network costs in meeting any such mandate.

⁵⁰ See, e.g., Comments of ITTA, WC Docket No. 17-84, at 4 (Jan. 17, 2018).

ironically, subsume one set of consumer welfare concerns⁵¹ in favor of another that will not be addressed fully by the proposed solution.

Fortunately, Chairman Pai recently stated that he is “pleased with the progress being made to implement SHAKEN/STIR . . . Recent announcements indicate that all of the largest voice service providers can meet [the Commission’s] deadline.”⁵² Hopefully, these two proposals will not be triggered. Nonetheless, in light of the considerations discussed above, as well as the likely imminence of legislation addressing the robocalls affliction, the Commission should shift its attention to a less draconian next step in the event any of the “major” voice service providers ends up not meeting the implementation deadline.

B. The Commission Should Defer Any Further SHAKEN/STIR Implementation Push Until After On-Point Legislation is Enacted

In recent months, the House and the Senate both have passed robocalls-combating legislation that would address many of the same issues raised in the *Third FNPRM*. On July 24, 2019, the Stopping Bad Robocalls Act (SBRA) cleared the House by a margin of 429-3.⁵³ On May 23, 2019, the Telephone Robocall Abuse Criminal Enforcement and Deterrence (TRACED) Act passed the Senate 97-1.⁵⁴ The bills share several provisions in common or that are, at least, substantially similar. As evinced by the vote counts, both chambers appear highly motivated to enact robocalls legislation.

⁵¹ See, e.g., *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, Second Report and Order, 33 FCC Rcd 5660, 5675-76, para. 34 (2018) (ensuring that under both tests supporting streamlined applications to discontinue legacy voice services, “customers will be assured a smooth transition to a voice replacement service that provides capabilities comparable to legacy TDM-based voice services”).

⁵² Press Release, FCC, Chairman Pai Statement on Progress by Major Phone Companies in Implementing Caller ID Authentication (Aug. 14, 2019), <https://docs.fcc.gov/public/attachments/DOC-359087A1.pdf>.

⁵³ Stopping Bad Robocalls Act, H.R. 3375, 116th Cong. (2019).

⁵⁴ TRACED Act, S. 151, 116th Cong. (2019).

The SBRA, for instance, would require the Commission to conduct a rulemaking proceeding relating to effective call authentication technology, and it lays out timelines and certain related lines of inquiry the Commission would be required to pursue.⁵⁵ The *Third FNPRM* addresses some of these issues but not all.⁵⁶ On the other hand, while the *Third FNPRM* proposes to mandate SHAKEN/STIR and then to consider whether there should be any timing modifications for small providers, the SBRA generally refers to implementation of “effective call authentication technology” and would require the Commission to consider whether there are alternative effective technologies that can be useful to small or rural providers with predominantly TDM networks. In light of these differences, and others, between at least the SBRA and the *Third FNPRM*, as well as the strong indications that legislation may be forthcoming in the very near term, it would be prudent for the Commission to defer further mandated implementation of SHAKEN/STIR until legislation is enacted.

C. If the Commission Does Move Forward with Mandating SHAKEN/STIR Implementation, it Must Adopt Measures to Ensure Successful Implementation

1. The Commission Should Adopt a Later Timetable for Implementation by Smaller and/or Medium-Sized, and/or Rural Voice Service Providers

Acknowledging that the record suggests that smaller and mid-sized voice service providers lack the financial ability and in-house professional expertise necessary to quickly implement the SHAKEN/STIR framework, the *Third FNPRM* seeks comment on whether the Commission should adopt staggered timetables that allow smaller and/or medium-sized

⁵⁵ See, e.g., SBRA § 7.

⁵⁶ Compare, e.g., *Third FNPRM* at 25-26, paras. 78, 80 (seeking comment on whether Commission should adopt staggered implementation timelines for smaller and/or medium-sized voice service providers, and how to encourage Caller ID authentication for providers that maintain some degree of TDM in their network) with SBRA § 7 (also directing the Commission to prescribe regulations related to implementation of effective call authentication technology, including a potential staggered implementation period for smaller and/or rural providers).

providers more time to implement the framework.⁵⁷ The answer is yes, and rural providers also should be subject to a later implementation.⁵⁸ As CATA explained, “given the varying degree of technological capabilities between communications services providers, as well as the nascent stage of vendor products capable of supporting SHAKEN/STIR, it will not be technologically feasible to implement the standard in a uniform timeframe throughout the industry.”⁵⁹ ITTA also agrees with commenters that identify other factors that are particular challenges for smaller or mid-size, rural providers and that militate towards a later timetable for their implementation.⁶⁰ Whatever timetable the Commission adopts should recognize that providers will need reasonable time to implement SHAKEN/STIR even after fully converting their networks to IP.

2. There Needs to be Cost Recovery Associated with Mandatory SHAKEN/STIR Implementation

The *Third FNPRM* reaffirms the *Declaratory Ruling*’s conclusion that the benefits associated with SHAKEN/STIR implementation will outweigh its costs.⁶¹ This conclusion is misplaced. ITTA shares the concerns both previously and recently expressed regarding SHAKEN/STIR implementation costs.⁶² Any mandated SHAKEN/STIR implementation must be accompanied by provision for appropriate cost recovery.⁶³

⁵⁷ See *Third FNPRM* at 26, para. 78. See also *id.* at 25, para. 75 (seeking comment on any exceptions the Commission should consider to a SHAKEN/STIR implementation requirement).

⁵⁸ See *id.* at 19, para. 56 (“recogniz[ing] that smaller voice service providers serving rural America . . . may need more time than their larger peers to transition their networks” to IP); *cf.* also SBRA § 7(b)(3)(A)(ii) (specifically providing Commission authority to delay call authentication technology implementation for certain classes of voice service providers, including, but not limited to, small providers and those in rural areas).

⁵⁹ *CATA Report* at 17.

⁶⁰ See, e.g., ACA Connects Comments at 5-6.

⁶¹ See *Declaratory Ruling and Third FNPRM* at 27, para. 81.

⁶² See *id.* (citing commenters that expressed concerns at an earlier stage of this proceeding).

⁶³ *Id.* (seeking comment on “whether cost recovery is likely to be an issue” associated with SHAKEN/STIR implementation).

Regardless of the merits of the Commission’s estimates of a \$3 billion “public benefit” from blocking calls,⁶⁴ neither the *Declaratory Ruling* nor the *Third FNPRM* attempts to quantify a benefit for providers from SHAKEN/STIR implementation. Therefore, ITTA does not concede a reduction in provider costs as a “given.”⁶⁵ In any event, as discussed above, at least at this juncture, SHAKEN/STIR at most should be one factor helping to determine what calls should get blocked. Thus, there are no cost benefits directly attributable to SHAKEN/STIR implementation. Accordingly, regardless of the merits of the Commission’s “expect[ation]” that providers will not recover costs associated with call blocking via a line item charge, at least it appropriately did not make the same specification with respect to SHAKEN/STIR implementation. As the Commission stated in the *Declaratory Ruling* pertaining to permissible call blocking, it “would impose no mandatory costs on voice service providers because implementation is voluntary, not required.”⁶⁶ Of course, any mandate to implement SHAKEN/STIR would render this rationale distinguishable.⁶⁷

There are estimates that SHAKEN/STIR implementation will cost providers hundreds of thousands of dollars per year.⁶⁸ On their face, these costs, onerous for providers of any size, would be particularly oppressive for small providers with, for example, a few thousand customers, who, absent cost recovery, would need to divert sums that otherwise would be

⁶⁴ *Id.* at 14-15, paras. 39-42.

⁶⁵ *But cf. id.* at 27, para. 81 (seeking comment on whether cost recovery associated with SHAKEN/STIR implementation is likely to be an issue “given that the net effect of this implementation is expected to reduce the providers’ total costs within a few years”).

⁶⁶ *Id.* at 15, para. 42.

⁶⁷ Similarly, to the extent the Commission claims that the permissive nature of call blocking represents a step it has taken to minimize a significant economic impact on small entities insofar as they can avoid compliance costs by declining to participate or by delaying implementation, *see id.* at 49, IRFA para. 25, an implementation mandate would negate such steps.

⁶⁸ FCC SHAKEN/STIR Robocall Summit, Statement of Brian Ford, Director of Industry Affairs, NTCA, at 2:55:30 (July 11, 2019), <https://www.fcc.gov/SHAKENSTIRSummit> (citing the vendor community estimating implementation costs of low-mid six figures per year).

devoted to other public interest benefits, such as broadband deployment, instead to cover SHAKEN/STIR implementation costs.⁶⁹ Further, although the SHAKEN/STIR governance authority has yet to determine how the funding and ultimate cost allocation of the certificate administration and management will be allocated, these costs also need to be considered and have the potential to burden smaller providers even prior to their implementation of SHAKEN/STIR. ACA Connects suggests that cost considerations could be further exacerbated by smaller providers, given their limited resources and personnel, being particularly likely to rely on third-party vendor solutions, and the adoption of an implementation mandate providing vendors with leverage to charge higher rates than they could charge otherwise in an open market.⁷⁰ And the costs could be orders of magnitude steeper for large providers, not only for implementation of the framework, but also for ongoing costs especially when combining the costs of analytics with SHAKEN/STIR.⁷¹

In light of all these considerations, SHAKEN/STIR implementation costs should be fully recoverable via rates, any line item that recovers government-mandated charges, or some other

⁶⁹ Cf. *Third FNPRM* at 19, para. 56 (seeking comment on how the Commission can ensure that any safe harbor, including one that fosters SHAKEN/STIR implementation, does not impose undue costs on eligible telecommunications carriers participating in the Commission’s high-cost program).

⁷⁰ See ACA Connects Comments at 5; see also *Third FNPRM* at 26, para. 78 (the record suggests that small and mid-size voice service providers “lack the financial ability and in-house professional expertise necessary to quickly implement the SHAKEN/STIR framework”).

⁷¹ As discussed above, SHAKEN/STIR without analytics would provide little value to consumers. See *supra* Sec. II.A.3. Thus, the costs associated with implementing SHAKEN/STIR may not be evaluated properly without consideration of the costs of analytics. Indeed, these necessary costs of analytics are significant as analytics require ongoing updates and adjustments due to the dynamic nature of nefarious robocalling schemes. In this regard, while providers may experience some cost savings associated with call blocking by thwarting unwanted calls that trigger annoyed (and costly) customer service contacts by subscribers, the *Declaratory Ruling*’s suggestion that such cost savings will “far” outstrip provider costs for analytics programs is far-fetched and unsubstantiated. *Contra Declaratory Ruling* at 15, para. 41.

mechanism.⁷² Providing for such recovery would fulfill the Commission’s avowed “inten[tion] to craft rules that encourage all carriers, including small businesses,” to take steps to foster call blocking, to “minimize the costs associated with implementing the proposed rules,” and to “minimize any disproportionate impact on small businesses.”⁷³

3. It is Not Clear How Requiring Terminating Providers that Have Implemented SHAKEN/STIR to Sign Calls that Have Originated on TDM Networks Would be Reliable

In conjunction with seeking comment on how to encourage Caller ID authentication for carriers that maintain some TDM networks, the *Third FNPRM* asks whether the Commission should require voice service providers that have implemented the SHAKEN/STIR framework to sign calls entering their network with either partial or gateway attestation.⁷⁴ This “solution” would seem to suggest a scenario where a terminating provider presumably with an IP network (insofar as it already has implemented SHAKEN/STIR) would supply some level of attestation in lieu of the originating provider with a TDM network doing so. To the extent the definition of partial attestation encompasses responsibility for origination of the call,⁷⁵ and the whole SHAKEN/STIR framework presumes attestation by the originating or gateway provider,⁷⁶ it is not clear to ITTA how this idea would be effective. It is also not clear how it would be

⁷² ITTA recognizes that the SBRA would “prohibit providers of voice service from making any additional line item charges to consumer or small business customer subscribers for the effective call authentication technology.” SBRA § 7(b)(5).

⁷³ *Declaratory Ruling and Third FNPRM* at 49, IRFA para. 25. See *CATA Report* at 16 (“to the extent implementation of SHAKEN/STIR is mandated by regulatory directive, the Commission must consider potential means of cost recovery for such implementation, particularly for smaller providers”).

⁷⁴ See *Declaratory Ruling and Third FNPRM* at 26-27, para. 80.

⁷⁵ See, e.g., *id.* at 22, para. 67 n.116.

⁷⁶ See *id.* at 8, para. 21; see also Verizon Comments at 2 (“Without a trustworthy cryptographic “signature” from the originating provider vouching for the accuracy of the calling party number transmitted with each call, neither Verizon nor any other carrier can validate the Caller ID of calls to our customers.”).

particularly useful even if it could work, as “spoofed calls could receive partial or gateway attestation.”⁷⁷ The Commission therefore should refrain from adopting this idea.

IV. CONCLUSION

The SHAKEN/STIR framework appears to hold promise as a solution to negate Caller ID spoofing. Aside from various limitations of the framework, and implementation and governance details that still need to be worked out, at best it serves as an analytical tool to inform blocking of unwanted and/or illegal calls. In the *Declaratory Ruling*, the Commission took a monumental step towards helping providers promote consumer welfare by removing legal impediments to providers implementing call blocking as a default measure on an opt-out basis, and permitting providers to rely on reasonable analytics as the foundation for call-blocking. The Commission now must retain focus and complete the job by adopting a safe harbor that furnishes providers with legal protections for offering call-blocking mechanisms. The safe harbor should provide liability protections at a minimum to those providers that use reasonable analytics to inform their call blocking.

Even if any major voice service provider fails to implement SHAKEN/STIR by the end of 2019, it should not trigger an industry-wide implementation mandate that will be considerably burdensome to multitudes of smaller and medium-sized providers, many of whom would not technologically be able to comply to begin with. It is highly likely that Congress will be speaking directly to these matters in the very near term. Rather than getting out ahead of Congress, the Commission should focus on implementing the legislation Congress enacts, and doing so in a manner that promotes successful implementation by all providers and

⁷⁷ *Third FNPRM* at 22, para. 67 n.117; see *Verizon Comments* at 8 (“If a carrier is permitted to sign a call with STIR/SHAKEN without knowing that the calling party number transmitted with the call is in fact correct, then the signature is useless for validating the Caller ID of the incoming call.”).

accommodates the particular needs of smaller and mid-size providers, rural providers, and providers still operating TDM networks.

Respectfully submitted,

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